## BY ORDER OF THE COMMANDER AIR MOBILITY COMMAND

AMCI 24-101V7 CL-3

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#### Transportation

#### C-5 PHASE II LOADING SUPERVISOR'S CHECKLIST

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This checklist complements AMCI 24-101V7, *AMC Aerial Port Phase II Aircraft Loading Program*, and is formatted so that it may be trimmed down to fit aircrew style checklist binders.

This checklist supercedes AMCI 24-101V7, CL-3 11 February 2000.

Items preceded by (  $\blacktriangleright$  ) indicate a change from the previous edition.

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#### 1. GENERAL INFORMATION

- 1.1. Items in this checklist are excerpts from the relevant portions of the basic aircraft flight manuals/loading instructions (TO 1C-5A-1 and TO 1C-5A-9) and are for use by Phase II loading supervisors. If conflict arises between this checklist and the T.O. checklists, the T.O. checklists will always take precedence.
- 1.2. Warnings, Cautions, and Notes. The following definitions apply to WARNINGS, CAUTIONS, and NOTES found in this checklist.

#### **WARNING**

1.2.1. Operating procedures, techniques, etc., which could result in loss of life if not carefully followed.

## **CAUTION**

1.2.2. Operating procedures, techniques, etc., which could result in damage to equipment if not carefully followed.

## **NOTE**

1.2.3. An operating procedure, technique, etc., which is considered essential to emphasize.

#### 2. LOAD PLANNING CHECKLIST

# 2.1. Total Load CG Location of Aircraft - DETERMINED.

Select desired center of gravity location for total cargo load. Also, compare center of gravity of total cargo load with desired center of gravity location on aircraft.

#### 2.2. Placement of Hazardous Materials - CHECKED.

Determine the placement of hazardous materials for accessibility, visual inspection, and jettisoning.

#### 2.3. Loading Sequence - DETERMINED.

Loading sequence will be based on aircraft limitations and offload sequence. Emergency jettisoning should also be a planning factor in determining load sequence.

#### 2.4. Roller Load Limits - CHECKED.

Calculate roller loads and check against roller load limitations.

#### 2.5. Floor Load Limits - CHECKED.

Calculate floor loads and check against floor load limitations.

- 2.6. Lateral Load Limits CHECKED.
- 2.7. Cargo Size Limits CHECKED.

2.8. Final Load Configuration - DETERMINED. Position cargo units according to tentative plan and determine final load configuration.

## 3. GENERAL INSTRUCTIONS: CARGO LOADING PREPARATION

- 3.1. General Instructions
- 3.1.1. Inspect the load to ensure proper pallet buildup; such as damaged pallets or tiedown equipment; sufficient tiedown to meet restraint criteria; compliance with safety aisle requirement; pallets are within limitations, etc.
- ▶ 3.1.2. Ensure pallets contain two properly completed AF Forms 2279, Pallet Identifier. When there is any question concerning the weight of a pallet, reweigh the pallet.
- 3.1.3. Ensure proper preparation of pallet train(s). Use restraint barriers, when applicable; CG marked; couplers properly in place; chain gates properly installed.
- 3.1.4. Inspect hazardous cargo shipments for evidence of damage, leakage, corrosion, or loose closure; proper sequencing for aircraft on/off loading at en route and destination stations, as well as being readily available for jettisoning.

#### **NOTE**

Hazardous cargo that is considered jettisonable shall not be positioned forward of non-jettisonable cargo, except when its size, weight, and location will permit jettisoning by hand. Depending upon the amount of hazardous cargo, placement aboard the aircraft should normally be planned for the aft section of the cargo compartment. Hazardous cargo will never be loaded in such a manner that would make jettisoning impossible.

- 3.1.5. Ensure the documentation for signature service cargo is in order. Take appropriate security measures to safeguard cargo, and ensure the cargo is easily accessible for loadmaster verification.
- 3.1.6. Ensure the proper amount of shoring is available for use during loading.
- 3.1.7. Ensure pneumatic tires are properly inflated.
- 3.1.8. Ensure personnel count the tiedown equipment used on the load, and retrieve a like amount (one for one, when available) from the aircraft.
- 3.1.9. Ensure standing water/snow is removed from pallets.
- 3.1.10. Properly sequence and secure the load aboard the MHE.

- 3.2. Cargo Loading Preparation
- 3.2.1. Cargo Unit Dimension CHECKED.
- 3.2.2. Weight of Cargo Units CHECKED.
- 3.2.3. CG Location of Cargo Units DETERMINED.
- 3.2.4. Roller Load Limits CHECKED.
- 3.2.5. Floor Load Limits CHECKED.
- 3.2.6. Shoring Requirements DETERMINED.
- 3.2.7. Dimensions, Weight, and CG Locations of Cargo Units MARKED.
- 3.2.8. Hazardous Materials CHECKED.
- 3.2.9. Soil Contamination and Pests CHECKED.
- 3.2.10. Mounted Cargo SECURED TO CARRIER.

## 4. AIRCRAFT PREFLIGHT: EXTERIOR

## 4.1. Aircraft Tail Number/Parking Spot- CHECKED.

Aircraft parked in a designated hazardous cargo loading area?

- 4.2. Aircraft Electrically Grounded CHECKED.
- 4.3. Main Gear Wheel Chocks IN PLACE.

Check main gear wheel chocks forward and aft; chocks should be three inches from wheels.

## 5. AIRCRAFT PREFLIGHT: INTERIOR

- 5.1. Flight Deck Ladder POSITIONED.
- 5.2. AFTO Form 781 Series CHECKED.

Ensure there are no noted deficiencies that prohibit aircraft on/off loading.

5.3. Parking Brake Set - CHECKED.

#### **NOTE**

Have maintenance crew chief ensure the aircraft brake selector is set to emergency and that aircraft parking brakes are set.

- 5.4. Cargo Compartment Left Side
- 5.4.1. Cargo Compartment Lights AS REQUIRED.
- 5.4.2. Tiedown Equipment CHECKED.
- 5.4.3. Aft Stowage Box (Stops/T-Locks) CHECKED.
- 5.4.4. Aft Inboard Rail Connector CHECKED.
- 5.4.5. Troop Compartment Ladder POSITIONED.
- 5.4.6. "A Frame" Rail INSTALLED/CHECKED.

- 5.5. Cargo Compartment Right Side
- 5.5.1. Aft Inboard Rail Connector CHECKED.
- 5.5.2. Aft Stowage Box CHECKED.
- 5.5.3. Tiedown Equipment CHECKED.
- 5.5.4. RH/LH Forward Rail Connector CHECKED.
- 5.6. Cargo Compartment Both Sides
- 5.6.1. Outboard Restraint Rails/Locks CHECKED.
- 5.6.2. Inboard Restraint Rails/Locks CHECKED/POSITIONED (As Required)
- 5.6.3. Roller Conveyers CHECKED/POSITIONED

# 6. AIRCRAFT PREPARATION: PALLETIZED CARGO LOADING

- 6.1. Doors and Ramps AS REQUIRED.
- 6.2. Roller Conveyers UP AND LOCKED.
- 6.3. Inboard Restraint Rails UP AND SECURED AS REQUIRED
- 6.4. Restraint Rail Detents RETRACTED.

## **CAUTION**

Do not step on mechanism. Individual mechanism controls will be controlled by hand only. If the detent of the rail mechanism protrudes inboard of the rail face, locking mechanisms will be damaged during loading. Detent will not be used to prevent over-travel of pallets.

- 6.5. Troop Compartment Ladder AS REQUIRED
- 6.6. Flight Deck Ladder AS REQUIRED

# 7. AIRCRAFT PREPARATION: FLOOR LOADING CARGO

- 7.1. Doors and Ramps AS REQUIRED.
- 7.2. Inboard Restraint Rails STOWED.
- 7.3. Roller Conveyers DOWN AND LOCKED.
- 7.4. Tiedown POSITIONED.
- 7.5. Doors and Hatches AS REQUIRED.

### **WARNING**

Sufficient doors and hatches will be opened to provide adequate ventilation for dispersal of fumes when loading self-propelled vehicles.

- 7.6. Troop Compartment Ladder AS REQUIRED
- 7.7. Flight Deck Ladder AS REQUIRED

#### 8. CARGO LOADING: PALLETIZED CARGO

## 8.1. Loading Crew Duties - BRIEFED.

Brief loading crewmembers on duties to be accomplished and hand signals to be used. Caution them to avoid excessive speed when rolling pallets into the aircraft. Personnel will maintain positive control of pallet movement at all times.

## 8.2. Guides to Observe Critical Clearances - ASSIGNED.

#### 8.3. Vehicle Driver - BRIEFED.

Caution driver to follow signals of guides for vehicle clearance judgment.

#### 8.4. Wheel Chock(s) - POSITIONED.

Position chock(s) to prevent vehicle from striking aircraft.

## 8.5. Vehicle - POSITIONED/ADJUSTED

Direct or have vehicle directed into position. Adjust level of vehicle rollers to the same level as the aircraft rollers.

## 8.6. Brakes - SET.

Driver shall remain at vehicle controls.

#### 8.7. Move Pallet onto Aircraft - COMPLETED.

#### **WARNING**

When rolling pallets into or out of the aircraft, avoid excessive speed.

If all rail locks can be engaged into the pallet, they will be engaged. However, a minimum of two rail locks shall always be operative and engaged for restraint of palletized cargo (one left and one right). Supplemental tiedown may be required.

## **CAUTION**

Locks shall not be used as pallet stops.

#### **NOTE**

Ensure pallet side rings are in the up position to prevent binding in the restraint rails.

- 8.8. Secure Pallet In Position SECURED.
- 8.9. Remaining Pallets LOADED. Repeat steps 7 and 8.
- 8.10. Loose Equipment STOWED.

#### 9. CARGO LOADING: FLOOR LOADED CARGO

9.1. Loading Crew Duties - BRIEFED.

Brief loading crewmembers on duties to be accomplished and hand signals to be used. Caution them to avoid excessive speed when rolling pallets into the aircraft. Personnel will maintain positive control of pallet movement at all times.

- 9.2. Guides to Observe Critical Clearances ASSIGNED.
- 9.3. Vehicle Driver BRIEFED.

Caution driver to follow signals of guides for vehicle clearance judgment.

9.4. Wheel Chock(s) - POSITIONED.

Position chock(s) to prevent vehicle from striking aircraft.

#### 9.5. Vehicle - POSITIONED/ADJUSTED

Direct or have vehicle directed into position. Adjust level of vehicle rollers to the same level as the aircraft ramp.

- 9.6. Brakes SET.
- 9.7. Load Cargo COMPLETED. Position cargo as required.

## 10. VEHICLE PREPARATION: BEFORE LOADING

#### 10.1. Vehicle Dimensions - CHECKED.

Determine vehicle dimensions; if they appear critical, check vehicular size limit charts or cargo profile.

## 10.2. Engines and Brakes - CHECKED.

Check vehicle engines and brakes for proper operation.

#### 10.3. Cargo Load On Vehicles - CHECKED.

Ensure that all cargo, loose accessories, and equipment are secure on or in the vehicles and have required restraint.

#### 10.4. Fuel Tanks - VERIFIED.

- 10.4.1. Verify that fuel levels in vehicles/items are within AFJMAN 24-204 limitations as follows:
- 10.4.1.1. Vehicles and self-propelled units may be transported with fuel in tank not to exceed 1/2 tank capacity when placed on the cargo floor (3/4 for Chapter 3 operations) and 1/2 tank on the cargo ramp.
- 10.4.1.2. Wheeled engine powered support equipment must be completely drained of fuel (purging is not required). Up to 17 ounces of fuel may be left in engine components and fuel lines provided all lines and fuel tanks are securely closed to prevent leakage of fuel. Must not exceed ½ tank for Chapter 3 operations.

- 10.4.1.3. Position units loaded on the aircraft ramp with fuel tank openings located on the high side of the ramp.
- 10.4.1.4. Equipment mounted on a single axle disconnected from its prime mover and loaded with it tongue resting on the floor or ramp must be drained but need not be purged.
- 10.4.1.5. Units which are susceptible to fuel spills or leakage will be drained for movement.

## 10.5. Tanker-Type Vehicles - CHECKED.

Presently, there are no tanker-type vehicles, either trailer or self-contained, certified for airlift with fuel or water in tank.

EXCEPTION: The M-149A2 water trailer has been certified for airlift containing water; however, the M-149A2 trailer shall not be routinely airlifted with water in tank on normal channel missions.

- 10.6. Fuel Caps, Battery, and Oil Filler Caps TIGHTENED.
- 10.7. Vehicle Weight and Weight of Cargo Loaded on Vehicle CHECKED.

Check vehicle weights (with cargo, if any) and determine wheel loads and axle loads. Check for weight and CG marked on side of vehicle.

- 10.8. Shoring Requirements DETERMINED.
- 10.9. Soil Contamination and Pests CHECKED.

#### 11. VEHICLE LOADING

- 11.1. Fire Extinguishers IN PLACE.
- 11.2. Ventilation CHECKED.
- 11.3. Shoring (If Required) INSTALLED.
- 11.4. Guides to Observe Critical Clearances APPOINTED.
- 11.5. Loading Crew Duties ASSIGNED.

Brief loading crew on their assigned duties and hand signals to follow.

11.6. Vehicle Drivers - BRIEFED.

Caution drivers to follow signals of guides and not attempt to judge clearance for themselves.

- 11.7. Cargo In or On Vehicles SECURED.
- 11.8. Vehicles to Be Loaded ALIGNED/SECURED
- 11.9. Vehicles In Lowest Gear/Range SET.
- 11.10. Stowage Position of Each Vehicle CHECKED

Check stowage position of each vehicle against load plan.

## 11.11. Vehicle(s) Parked - CHECKED.

Park vehicles with gasoline engines in the lowest gear (manual transmission) or park (automatic transmission). Park vehicle(s) powered by diesel engines in neutral (manual transmission) or park (automatic transmission).

- 11.12. Brakes SET
- 11.13. Ignition OFF
- 11.14. Engine STOPPED.

#### 12. TIEDOWN

12.1. Types and Number of Tiedown Devices Required For Restraint Criteria - COMPUTED.

Determine types and number of tiedown devices required to meet restraint criteria.

- 12.2. Installation of Tiedown Devices SUPERVISED.
- 12.3. Device Installation CHECKED.

Double check device installation and tighten.

12.4. Loose Equipment - STOWED.

Stow all loose equipment, i.e., straps, chains, devices, etc.

#### 13. AFTER LOADING CHECKLIST

13.1. Cargo - CHECKED.

Check for fumes, leaks, placement of cargo, and location of special handling cargo.

13.2. Load Restraint - CHECKED.

Ensure all tiedown devices are secure.

- 13.3. Loose Equipment STOWED.
- 13.4. Tiedown Equipment INVENTORIED.

If available, remove a like number of chains, devices, and straps (one for one exchange) from the aircraft.

13.5. Curb Lights - OFF

#### 14. CARGO / VEHICLE OFF-LOADING

14.1. Aircraft Preparation - CHECKED.

### **NOTE**

Offloading procedures for all type loads are essentially the reverse of onloading procedures. Perform applicable portions of this checklist for type of cargo to be offloaded.

- 14.2. Offloading Equipment OBTAINED.
- 14.3. Tiedowns/Forward Support Leg/Wheel REMOVED/SECURED.

## **CAUTION**

Ensure there is adequate restraint on palletized cargo to keep it from shifting or falling when moving pallets into and out of the aircraft.

- 14.4. Ventilation AS REQUIRED.
- 14.5. Vehicle Air Pressure and Brakes CHECKED.
- 14.6. Floor Obstructions REMOVED.
- 14.7. Offload Cargo/Vehicle SUPERVISED.
- 14.8. Loose Equipment STOWED.

#### **▶ 15. EMERGENCY PROCEDURES**

- 15.1. Warn The Loading/Ground Crew Of The Danger And Direct The Evacuation Of The Airplane.
- 15.2. Notify The Fire Department By Any Available Means.
- 15.3. Shut Down All Operating Aircraft Systems

#### **WARNING**

If Flammable and/or Explosive Materials Are Onboard, Unload These Items First. Failure To Comply Could Result In The Spread Of The Fire and/or Onboard Explosions That Could Result In Serious Injury To Personnel.

- 15.4. If The Fire Source Is Immediately Accessible/Removable, Immediately Remove From the Aircraft.
- 15.5. If Possible, Try To Put Out The Fire With Onboard Portable Fire Extinguishers.